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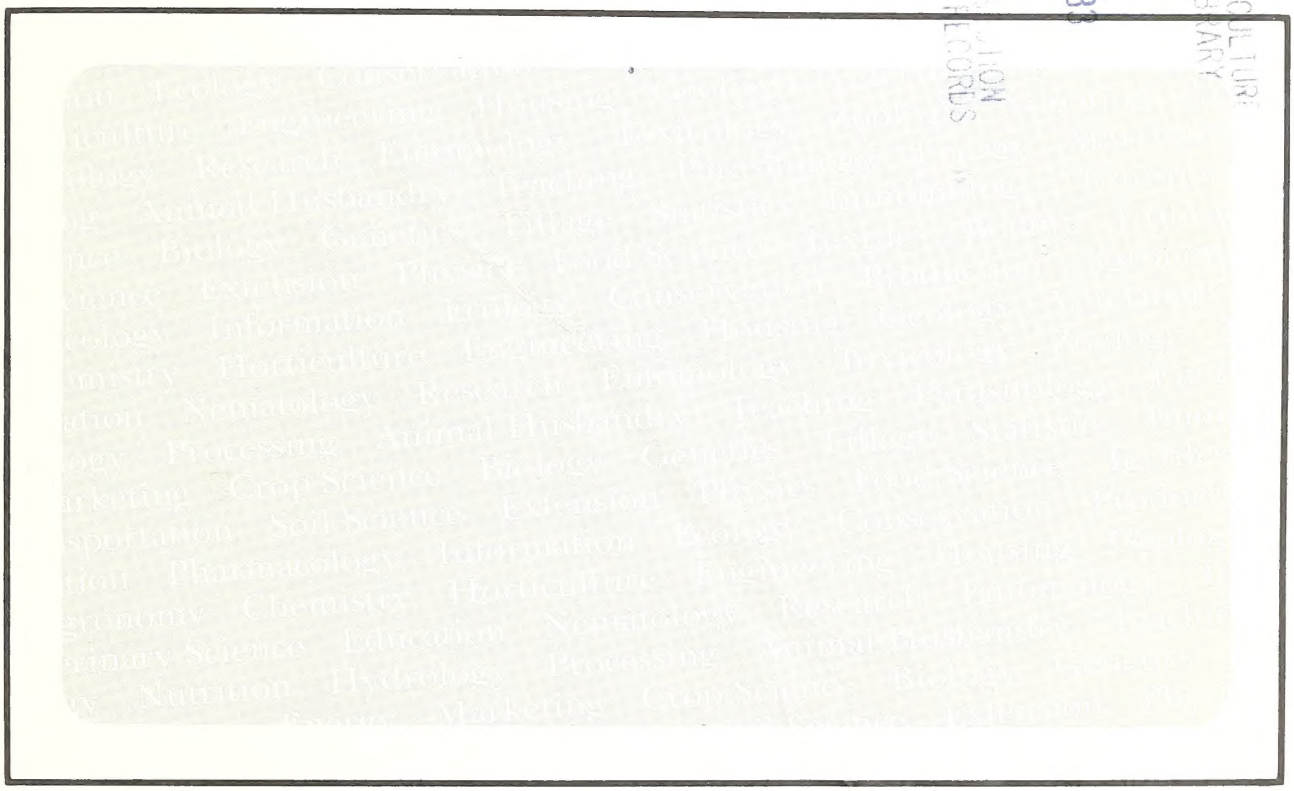
Stoneville, Miss., Weather Normals, 1960-79



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STONEVILLE, MISS., WEATHER NORMALS, 1960-79

By Dennis D. Hull,[1] M. A. Brown,[2] Gene Rench,[1] John S. Hursh,[1] and C. D. Ranney[3]

ABSTRACT

Data from 20 years of weather observations from Stoneville, Miss., are summarized for each day of the year to provide a data base useful in agricultural systems modeling, research planning, and agricultural production. Product-moment correlations among climatic variables are estimated for each month and pooled across months. Index terms: air temperature; climate; evaporation; Mississippi Delta; precipitation; soil temperature; solar radiation; Stoneville, Miss.; weather; wind.

INTRODUCTION

Increasingly, research has concentrated on using knowledge of interrelationships among different variables to predict response of a system rather than response of individual facets of that system. This approach requires knowledge of the different factors affecting a system. One of the most important factors affecting the agricultural system is the weather. Ambient temperatures, soil temperatures, precipitation, evaporation, wind movement, and solar radiation affect responses of plants, animals, soil, and insects. The objective of this study was to estimate means and standard deviations of different weather variables for each day of the year that might be useful in agricultural systems modeling, research planning, or production in the mid-Delta area of Mississippi.

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PROCEDURES

Data

Data used in this study were 20 years of weather observations (tables 1-12) taken from 1960 to 1979 at Stoneville, Miss., and compiled by the National Weather Service (NWS), the Delta Branch Experiment Station (DBES), and the U.S. Agricultural Research Service (ARS). Individual variables measured are detailed below.

Observation Site

From June 25, 1976, through 1979 the observation site was located south of the slotted-floor feedlot and barn along Deer Creek and just north of Field 1 (lat. 33°26' N., long. 90°55' W.). From May 28, 1963, to June 24, 1976, observations were taken on the DBES campus about 350 ft east of Building 101 (lat. 33°25' N., long. 90°55' W.). Before that, the weather site was located just west of Building 101 where a cluster of greenhouses now stands. Essentially, no changes to long-term norms resulted from these moves. Observations were taken at 8 a.m. local time.

Air Temperatures

Maximum and minimum air-temperature measurements were taken at a height of 5 ft above a sod surface with thermometers conforming to NWS specifications. The mercury-filled maximum thermometer had an instrument error of ±0.3° F at temperatures more than 0° F and ±1° F at temperatures less than 0° F. The minimum bulb was filled with amber spirits (alcohol) and had an instrument error of ±0.4° F at temperatures more than 0° F and ±1° F at temperatures between 0° and -50° F. From the period April 1971 to May 1976, weekend measurements were recorded on a Belfort hygrothermograph. All readings were taken to the nearest whole degree. Since only one observation was taken each day, there were a few instances where the reset temperature from the previous morning was taken to be the minimum temperature for the current day. This occurred most frequently during warming trends in the fall, winter, and spring.

Soil Temperatures

Maximum and minimum soil temperatures were taken beneath a level, bare-soil plot (15 ft by 15 ft) at a 2-inch depth. Palmer soil thermometers conforming to NWS specifications were used. Instrument error was ±1° F between 0° and 100° F and ±2° F at extremes. From April 1971 to May 1976, measurements were recorded on a thermograph with an instrument error of ±1° F. Data from the thermograph were checked with readings from the Palmer soil thermometers, and corrections were applied where needed. The soil at the last site was Bosket sandy loam; at the two previous sites, the soil was Dundee silt loam. As with air temperatures, there were a few instances where the reset temperature from the previous morning was taken to be the minimum temperature for the current day. All readings were taken to the nearest whole degree.

Precipitation

Rainfall measurements were made to the nearest 0.01 inch with a standard rain gage conforming to NWS specifications. Any observation of less than 0.005 inch was recorded as a trace. Water equivalent of frozen or freezing precipitation falling into the 8-inch gage, with funnel removed, was recorded in the rainfall column to the nearest 0.01 inch.

Evaporation and Wind

Evaporation was measured with a standard monel pan built to specifications of the World Meteorological Organization. The cylindrical pan measured 10 inches deep and 47.5 inches inside diameter and was located on a ventilated wooden platform. Daily readings from a hook gage determined the level of water. This was subtracted from the previous day's reading to determine the amount of evaporation in hundredths of an inch. There are 20 years of records for the months April through October. Data for November through March were recorded beginning in 1975. But several observations are missing due to freezing temperatures. From April 1971 to May 1976, weekend evaporation was estimated from maximum temperature and wind.

A 3-cup anemometer for measuring wind movement over the evaporation pan was mounted on the wooden pan support. The anemometer had a starting speed of 2.5 mi/h. Total daily movement was measured in miles past a point 22 inches above ground and 7 inches above the rim of the evaporation pan. Missing observations were estimated from an anemometer on top of Building 101 and a recorder in the weather office.

Solar Radiation

Measurements of solar radiation began in 1964 and were done with a bimetallic pyrheliograph to measure sun and sky radiation. The dome of this instrument was Pyrex glass with a transmission coefficient of 90% for wavelengths from 360 to 2,000 nm.

Beginning in 1974, an Eppley black-and-white pyranometer (model 8-48) was used atop DBES Building 101. This instrument conformed to NWS specifications for measuring global, sun, and sky radiation. Its dome was transparent to wavelengths between 280 and 2,800 nm. Radiation collected by the pyranometer was also charted graphically.

Data extraction through the use of a planimeter and equal-area estimation proved to be time consuming and subject to error. In April 1976, this method of manual integration was replaced by an integrator that automatically converted voltage to frequency. The bimetallic pyrheliograph served as a backup in case of breakdown in this system. The measurements were in langleys (cal/cm^2) per day.

There were a few times when calibration was thrown off by condensation in the measuring device, but this occurred rarely. Frost, ice buildup, or snow occasionally caused minor errors in the wintertime radiation readings.

Statistical Analyses

Means and standard deviations were estimated for individual days of the year averaged across years. Years were considered random, and the estimates of standard deviations are the square root of estimates of the sums of variance components for year, year by day of year, and sampling. Standard errors for the means can be estimated by dividing the estimate of the standard deviation by the square root of the number of observations in the mean.

Air temperatures, soil temperatures, and precipitation means are based on 20 years for most dates except 7/21, 12/2, 12/3, 12/5, 12/6, 12/13, 12/14, and 12/17, where 19 years of data were available. Soil-temperature means for 5/27 to 6/18 are based on 19 years of data.

Evaporation and wind were normally measured from 4/1 to 10/30 during the years these data were compiled, and evaporation means are based on 20 years' data between these dates. Exceptions for evaporation occurred on 4/1, 4/11, 4/23, 5/7, 6/1, 7/21, 9/1, 9/20, and 10/30, where means were based on 19 years of data. An exception for wind occurred on 7/21, where there were 19 years of data. Means for evaporation and wind for dates other than these were generally based on 5 years of data or less and are therefore less reliable, although unbiased.

Solar radiation means were based on 16 years of data (1964-79) with some exceptions. Solar radiation means for 1/23 to 1/26, 1/28, 1/29, 3/13 to 3/19, 3/29 to 3/31, 7/21, 11/18, 11/19, 12/2, 12/3, 12/5, 12/6, 12/12 to 12/14, 12/17, 12/22, and 12/24 to 12/27 were based on 15 years rather than 16 years. The solar radiation mean for 1/27 was based on 14 years.

Monthly averages are estimated at the bottom of the table for each month. Estimates of monthly means are unweighted averages of means for days within a month and are unbiased by unequal numbers of years in the daily estimates. Estimates of monthly standard deviations are pooled across days within a month.

Residual correlations among climatic variables were estimated for each month (tables 13-24), after removing day effects, and pooled across months (table 25) based on the largest number of paired observations available. They are residual correlations because they are calculated from the residual variance-covariance matrix after fitting day effects. These correlations should be useful if linear relationships among variables are needed in modeling efforts.

Table 1.--Stoneville weather normals for January, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	47.2	12.7	33.7	11.5	40.4	11.2	47.8	9.2	40.9	6.9	44.4	7.6	.21	0.62	.00	.	101.6	32.8	191.4	105.0	1
2	49.3	11.9	33.0	11.8	41.2	11.0	47.8	8.3	40.3	7.6	44.0	7.7	.32	0.80	.00	.	82.0	53.1	179.0	114.0	2
3	47.8	11.2	31.7	7.1	39.7	7.9	47.5	6.8	38.8	4.8	43.1	5.0	.37	0.66	.00	.	60.6	56.8	165.5	118.1	3
4	46.6	9.0	30.4	6.7	38.5	6.7	46.0	6.9	37.3	4.3	41.6	4.9	.34	0.77	.03	0.05	77.8	17.8	221.8	120.9	4
5	46.8	11.0	30.8	6.9	38.8	7.8	45.2	7.4	36.7	4.1	40.9	5.2	.09	0.16	.00	.	65.6	34.8	167.4	117.0	5
6	46.8	12.3	32.8	7.2	39.8	8.8	46.8	7.5	38.6	4.8	42.7	5.4	.41	0.77	.06	0.08	70.4	23.9	179.0	98.0	6
7	47.8	13.4	31.8	9.3	39.8	10.7	48.2	8.6	38.4	5.3	43.3	6.3	.21	0.53	.02	0.04	103.2	71.6	201.4	119.3	7
8	48.1	16.3	30.8	11.2	39.5	12.9	47.2	10.5	38.1	6.9	42.7	8.0	.12	0.23	.03	0.04	78.8	58.6	209.8	103.1	8
9	45.8	14.3	28.8	9.5	37.3	11.0	45.9	10.8	37.5	6.8	41.7	8.2	.20	0.41	.00	.	84.6	61.3	188.9	116.7	9
10	45.4	16.4	28.1	13.3	36.8	13.9	45.5	10.3	37.5	7.0	41.5	8.0	.31	0.56	.14	.	96.4	29.4	191.1	111.4	10
11	45.1	14.3	29.6	13.3	37.3	13.1	45.5	10.6	37.5	6.4	41.5	7.9	.20	0.50	.01	.	74.4	41.5	203.6	132.1	11
12	45.8	14.3	29.2	11.1	37.5	11.7	44.0	10.6	37.6	6.3	40.8	8.1	.06	0.16	.00	.	84.8	55.7	175.6	110.5	12
13	48.3	15.9	29.8	12.8	39.1	13.5	47.1	11.9	38.3	7.9	42.7	9.5	.02	0.03	.12	.	118.4	51.9	203.6	115.0	13
14	48.1	13.0	30.2	13.9	39.1	12.7	48.0	10.2	38.1	8.2	43.1	8.8	.12	0.27	.07	.	53.8	22.4	234.9	120.4	14
15	48.0	10.2	29.4	9.1	38.7	8.7	48.1	9.5	37.8	6.2	42.9	7.0	.13	0.26	.13	.	57.4	25.4	307.9	73.2	15
16	48.2	11.4	28.6	9.4	38.4	9.7	47.8	9.4	36.8	5.1	42.3	6.6	.01	0.02	.00	.	103.0	39.1	248.6	118.9	16
17	51.8	12.2	29.8	11.4	40.8	10.7	47.9	10.5	37.9	7.0	42.8	8.0	.12	0.34	.00	.	92.0	34.1	231.2	131.0	17
18	50.9	15.4	33.0	12.5	42.0	12.6	48.8	10.4	39.0	8.4	43.9	8.8	.04	0.07	.15	0.17	117.2	23.0	191.6	126.0	18
19	50.4	15.4	33.3	12.3	41.8	13.0	50.1	11.1	41.0	7.3	45.6	8.8	.09	0.19	.13	0.03	120.0	25.8	227.8	120.9	19
20	48.8	12.8	32.4	12.6	40.6	11.6	47.8	9.6	40.5	8.0	44.1	8.4	.30	0.92	.07	0.05	68.2	48.3	224.1	108.8	20
21	53.9	14.4	31.8	11.3	42.8	11.7	50.8	10.7	38.5	6.3	44.6	7.9	.10	0.30	.11	0.03	65.8	22.8	254.7	109.9	21
22	54.9	13.7	34.8	11.0	44.8	11.6	52.8	10.5	39.7	7.2	46.3	8.4	.03	0.07	.11	.	67.8	33.5	212.8	91.2	22
23	52.9	14.9	36.7	13.1	44.8	13.2	52.8	10.1	42.4	9.3	47.6	9.2	.21	0.39	.13	.	130.8	73.5	225.5	117.5	23
24	50.8	14.0	34.6	13.2	42.7	13.1	51.8	9.5	41.7	8.6	46.8	8.6	.25	0.43	.07	0.07	86.8	43.0	212.4	146.9	24
25	52.8	14.0	33.8	12.2	43.3	12.0	51.4	9.8	40.8	7.6	46.1	7.9	.15	0.23	.12	0.04	107.2	59.6	216.9	136.8	25
26	53.0	14.0	34.5	10.8	43.8	11.4	51.0	10.8	39.9	6.7	45.5	8.1	.18	0.41	.07	0.06	100.4	38.8	249.8	136.0	26
27	52.5	15.9	32.9	8.9	42.7	11.5	53.6	10.7	39.0	6.1	46.3	7.3	.20	0.41	.08	0.03	81.6	53.6	291.9	97.0	27
28	52.2	14.1	33.8	11.5	43.0	11.9	52.6	10.3	41.1	6.3	46.9	8.0	.10	0.19	.09	.	82.8	41.5	263.9	136.1	28
29	50.1	16.1	32.6	14.7	41.4	14.6	51.0	12.3	40.8	9.0	45.9	10.2	.09	0.19	.12	0.01	53.0	30.3	282.9	127.5	29
30	52.3	16.1	33.8	13.7	43.1	14.0	50.8	13.3	39.9	8.5	45.4	10.3	.07	0.24	.07	0.03	47.0	27.8	240.4	138.1	30
31	51.8	13.2	32.8	12.5	42.3	11.7	51.0	11.0	40.2	8.2	45.6	9.0	.05	0.11	.03	.	90.5	50.9	238.1	134.8	31
MO. AVG	49.5	13.8	31.9	11.4	40.7	11.6	48.8	10.1	39.1	7.0	44.0	8.0	.16	0.43	.06	0.06	84.6	44.0	220.4	118.7	

Table 2.--Stoneville weather normals for February, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	54.5	13.2	35.4	11.2	45.0	11.0	51.8	9.4	41.4	8.2	46.6	8.2	.15	0.34	.14	.	71.5	35.4	216.7	145.5	1
2	53.5	11.1	36.4	10.1	45.0	9.6	52.6	9.6	42.3	8.5	47.5	8.8	.24	0.46	.12	.	81.3	27.8	243.8	142.4	2
3	48.9	12.0	31.3	7.2	40.1	8.6	50.6	7.2	39.5	5.6	45.1	5.4	.12	0.39	.05	0.04	66.2	15.3	302.9	168.6	3
4	54.7	9.9	32.4	8.5	43.5	8.4	53.9	7.9	38.8	4.7	46.3	5.5	.11	0.34	.06	0.06	79.8	35.2	326.9	115.6	4
5	55.7	8.9	34.3	8.5	45.0	7.6	53.9	7.5	39.9	5.5	46.9	5.6	.05	0.13	.14	0.00	124.6	53.7	286.8	111.4	5
6	52.3	13.8	33.8	7.3	43.1	9.6	52.8	10.8	40.3	6.2	46.6	7.6	.15	0.37	.04	0.04	124.2	45.4	233.6	150.8	6
7	47.9	11.8	32.6	7.6	40.3	8.9	49.5	7.5	39.9	5.3	44.7	5.8	.10	0.26	.04	0.04	83.0	44.9	280.9	125.7	7
8	50.1	12.3	31.7	9.3	40.9	9.5	50.0	8.2	38.9	4.9	44.5	5.7	.08	0.27	.14	0.06	90.8	65.5	314.8	134.1	8
9	51.8	14.8	31.5	10.9	41.7	12.0	51.0	9.7	38.5	5.8	44.8	6.9	.08	0.34	.11	0.04	83.2	44.8	320.8	108.9	9
10	57.6	8.6	32.6	10.9	45.1	8.8	54.0	9.0	39.5	7.4	46.8	7.5	.35	1.21	.11	0.01	75.6	57.8	361.0	108.3	10
11	56.9	10.1	32.8	8.6	44.8	7.9	54.8	7.9	39.0	5.9	46.9	5.8	.14	0.37	.10	0.03	95.4	36.5	317.6	166.8	11
12	55.3	11.9	35.0	8.1	45.1	8.7	54.6	6.9	40.3	5.5	47.4	5.1	.16	0.25	.05	0.02	106.6	53.2	287.8	143.5	12
13	56.6	12.9	35.0	8.3	45.8	9.9	54.1	7.7	39.5	5.3	46.8	5.9	.18	0.33	.07	0.04	71.8	63.1	313.9	130.0	13
14	57.2	12.4	36.5	10.9	46.9	10.8	55.5	9.0	41.8	7.0	48.6	7.3	.06	0.26	.10	0.02	107.8	61.7	295.4	145.5	14
15	55.4	13.4	38.5	9.5	47.0	10.7	55.4	8.3	42.6	7.4	49.0	6.8	.14	0.32	.12	0.06	103.4	53.6	215.9	143.7	15
16	51.0	12.3	37.1	9.6	44.0	10.4	53.1	8.6	43.0	6.8	48.0	7.1	.26	0.43	.07	0.06	103.2	45.0	243.8	136.6	16
17	53.4	12.3	34.8	9.6	44.1	10.0	55.3	9.5	41.5	6.5	48.4	7.2	.02	0.05	.13	0.06	119.0	62.3	301.3	133.8	17
18	55.2	13.2	36.0	9.0	45.6	10.5	56.3	9.0	41.4	7.5	48.8	7.6	.34	0.73	.15	0.03	64.6	25.8	344.4	129.2	18
19	54.0	7.9	34.9	7.6	44.5	7.2	57.3	5.6	41.0	5.7	49.1	4.9	.16	0.35	.11	0.07	56.2	9.4	407.1	124.4	19
20	57.1	6.9	34.5	5.7	45.8	5.7	56.6	6.5	39.6	5.3	48.1	5.4	.26	0.78	.11	0.11	106.6	44.9	370.8	139.9	20
21	56.6	14.9	35.7	7.5	46.1	10.3	56.1	9.3	40.9	5.7	48.5	6.5	.37	0.80	.14	0.08	107.4	38.1	327.6	166.0	21
22	53.1	11.5	35.1	11.0	44.1	10.5	55.1	6.8	41.1	6.0	48.1	5.4	.20	0.45	.11	0.10	155.4	62.6	305.9	165.6	22
23	58.0	10.3	35.0	11.0	46.5	9.5	57.9	8.0	42.3	6.9	50.1	6.6	.14	0.44	.10	0.05	95.4	35.8	349.6	174.3	23
24	55.8	10.4	37.3	8.5	46.6	8.3	56.8	6.6	42.3	6.5	49.5	5.6	.08	0.16	.16	0.03	118.6	36.5	340.4	155.0	24
25	57.6	13.7	36.5	9.7	47.1	11.0	57.9	9.2	41.4	6.5	49.6	7.1	.21	0.41	.15	0.10	109.8	51.2	388.7	142.5	25
26	58.4	11.7	36.0	9.4	47.3	9.7	59.0	8.2	42.1	6.1	50.6	6.6	.09	0.33	.18	0.06	95.0	65.3	343.1	137.0	26
27	59.1	9.1	35.4	6.5	47.3	6.7	59.4	8.3	41.9	5.6	50.6	6.3	.08	0.15	.12	0.06	54.4	22.1	359.2	155.8	27
28	58.6	11.5	37.3	6.1	48.0	7.3	58.4	7.7	42.4	6.1	50.4	6.0	.20	0.36	.12	0.05	78.4	31.9	334.2	153.7	28
MO. AVG	54.9	11.7	34.9	9.0	44.9	9.4	54.8	8.3	40.8	6.3	47.8	6.5	.16	0.46	.11	0.06	93.9	46.5	312.0	142.4	

Table 3.--Stoneville weather normals for March, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	59.8	13.3	40.2	9.4	50.0	10.7	60.0	10.2	44.3	6.7	52.2	7.8	.07	0.18	.13	0.03	86.4	28.0	347.8	111.0	1
2	59.5	12.0	40.6	9.2	50.1	9.8	58.8	8.7	45.0	7.4	51.9	7.2	.32	0.59	.16	0.11	143.0	39.8	285.1	114.0	2
3	59.1	16.3	40.2	10.6	49.6	12.7	58.7	10.6	44.3	8.3	51.5	8.8	.19	0.43	.13	0.04	131.0	29.0	283.4	173.2	3
4	60.2	14.8	42.1	12.4	51.2	13.3	61.0	9.3	45.4	8.9	53.2	8.8	.33	0.99	.19	0.14	82.2	58.0	366.3	123.7	4
5	57.8	12.4	40.1	12.6	48.9	11.7	59.0	8.5	44.8	10.2	51.9	8.9	.15	0.40	.09	0.04	76.8	29.1	380.1	157.1	5
6	59.5	11.9	38.7	11.2	49.1	10.7	60.3	7.6	44.0	9.1	52.1	7.8	.11	0.28	.13	0.07	95.0	31.6	350.9	158.0	6
7	61.3	12.2	39.1	11.0	50.2	11.2	62.1	10.4	43.5	8.2	52.8	8.6	.10	0.26	.11	0.05	91.8	32.2	377.5	144.4	7
8	61.3	10.4	40.2	9.0	50.8	8.6	62.1	9.1	44.5	7.7	53.3	7.4	.10	0.18	.10	0.08	102.4	32.7	401.4	166.1	8
9	61.2	9.9	42.1	10.4	51.6	9.1	61.5	9.5	44.6	8.0	53.0	7.7	.17	0.42	.12	0.09	106.8	50.5	344.0	181.4	9
10	61.9	9.0	41.3	8.9	51.6	8.1	63.8	7.9	44.8	7.5	54.3	6.9	.16	0.31	.12	0.01	96.6	65.9	399.6	172.1	10
11	65.0	10.7	44.4	9.1	54.7	8.9	63.4	8.1	47.3	7.8	55.3	6.7	.20	0.50	.09	0.06	120.8	47.6	316.7	188.9	11
12	65.5	13.5	45.3	9.4	55.4	10.6	66.1	9.5	48.5	7.9	57.3	7.7	.39	0.61	.13	0.09	124.6	41.3	369.7	178.3	12
13	62.8	13.0	45.2	9.9	54.0	11.0	63.3	8.3	48.0	6.8	55.6	7.0	.30	1.02	.09	0.07	128.4	63.8	318.1	175.6	13
14	63.8	11.8	44.0	10.5	53.9	10.5	65.5	8.8	47.8	7.7	56.6	7.5	.07	0.20	.14	0.07	56.8	10.7	382.7	159.2	14
15	63.6	9.8	43.8	9.0	53.7	8.6	63.9	9.7	48.8	7.5	56.3	7.4	.20	0.40	.14	0.09	96.0	25.7	345.3	215.7	15
16	62.8	8.0	43.7	6.3	53.3	6.0	64.7	6.9	48.0	5.5	56.3	5.6	.30	1.02	.12	0.07	72.8	20.8	403.5	186.6	16
17	66.8	10.4	42.7	7.7	54.8	8.5	66.5	6.0	46.8	5.3	56.6	4.8	.10	0.21	.14	0.08	113.6	73.6	452.5	142.9	17
18	66.9	9.1	44.9	9.0	55.9	8.2	66.8	5.5	48.1	6.5	57.5	5.4	.10	0.24	.20	0.06	121.4	46.3	382.5	142.4	18
19	69.1	11.5	46.7	9.7	57.9	9.9	68.1	8.6	49.5	7.3	58.8	7.2	.27	0.80	.20	0.04	90.8	33.1	433.7	144.5	19
20	65.4	11.9	47.5	10.0	56.5	10.4	67.6	8.0	50.3	7.1	59.0	6.7	.06	0.11	.21	0.04	124.4	54.1	403.7	168.2	20
21	61.5	11.1	45.4	9.4	53.5	9.5	64.3	8.8	50.3	6.7	57.3	7.1	.19	0.31	.15	0.07	89.0	37.5	353.0	202.0	21
22	65.2	9.9	40.8	9.5	53.0	8.8	68.2	8.8	47.0	7.3	57.6	6.8	.11	0.30	.16	0.04	62.8	36.1	518.9	139.0	22
23	66.8	9.0	43.0	7.9	54.9	6.7	68.4	7.5	47.8	6.8	58.1	5.8	.07	0.16	.19	0.05	114.4	77.4	436.8	167.4	23
24	63.1	10.8	43.6	8.9	53.4	8.8	64.9	6.1	47.6	5.6	56.3	4.8	.07	0.22	.16	0.10	80.4	37.7	363.2	170.9	24
25	61.1	11.2	42.9	8.8	52.0	9.1	62.6	9.2	48.2	6.3	55.4	6.6	.19	0.45	.13	0.08	74.2	29.5	328.0	182.1	25
26	63.0	10.6	42.2	7.8	52.6	8.3	65.1	8.7	47.4	6.7	56.3	6.6	.25	0.54	.19	0.08	99.0	26.8	359.9	194.5	26
27	69.0	6.6	43.6	8.3	56.3	6.4	69.8	5.7	48.7	7.1	59.3	5.8	.12	0.31	.19	0.10	119.2	94.2	445.1	173.1	27
28	73.5	5.0	48.6	7.4	61.1	5.3	72.9	6.6	51.2	6.2	62.0	5.7	.20	0.49	.20	0.08	124.2	61.6	431.4	158.2	28
29	70.1	11.1	51.4	6.5	60.8	8.0	71.3	8.8	54.4	5.8	62.8	6.1	.34	0.55	.13	0.10	111.4	54.4	415.7	204.5	29
30	67.5	12.4	48.6	10.0	58.1	10.4	69.0	10.2	53.0	8.2	61.0	7.9	.20	0.44	.18	0.07	83.8	46.2	434.0	182.3	30
31	71.1	10.5	47.8	8.6	59.5	7.8	72.5	8.0	52.5	7.0	62.5	6.4	.21	0.47	.22	0.10	82.1	43.9	501.1	101.8	31
MO. AVG	64.1	11.2	43.6	9.4	53.8	9.4	64.9	8.5	47.6	7.3	56.3	7.0	.18	0.50	.15	0.08	100.1	47.1	384.9	166.0	

Table 4.--Stoneville weather normals for April, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	73.9	8.5	49.0	6.5	61.5	6.8	72.9	7.0	53.1	6.4	63.0	6.1	.02	0.06	.23	0.11	94.6	49.8	434.0	181.1	1
2	73.2	8.1	48.8	6.7	61.0	6.6	74.9	6.7	53.5	5.9	64.2	5.4	.28	0.60	.20	0.06	84.6	41.0	447.5	171.7	2
3	72.4	9.9	51.3	9.1	61.9	8.8	74.0	8.0	55.0	8.0	64.5	6.8	.05	0.14	.19	0.08	93.0	45.3	410.4	173.3	3
4	68.9	8.6	51.2	8.8	60.1	7.7	72.7	7.2	56.0	7.7	64.3	6.4	.14	0.33	.19	0.07	80.6	34.0	414.7	150.5	4
5	66.8	8.3	48.0	9.1	57.4	8.1	72.6	7.3	53.4	7.5	63.0	6.2	.09	0.33	.19	0.09	81.6	41.6	499.6	153.7	5
6	70.1	10.5	47.5	9.0	58.8	8.5	74.0	9.8	52.8	8.0	63.4	7.4	.14	0.36	.18	0.09	76.0	32.1	517.6	161.9	6
7	74.6	7.8	50.5	8.2	62.5	7.1	76.2	9.1	54.6	7.2	65.4	7.2	.08	0.22	.20	0.08	72.4	43.3	456.9	175.8	7
8	72.5	9.6	50.8	6.5	61.7	7.3	74.5	9.0	54.9	6.6	64.7	6.8	.20	0.48	.20	0.06	86.1	35.6	447.8	185.4	8
9	71.0	9.2	50.8	10.0	60.9	8.8	76.6	7.6	55.3	7.3	66.0	6.4	.16	0.43	.21	0.08	65.3	29.8	515.3	181.9	9
10	74.0	7.6	50.0	10.3	62.0	8.1	77.6	8.1	56.2	8.3	66.9	6.9	.06	0.17	.20	0.06	75.3	39.7	485.1	142.6	10
11	73.4	8.5	51.4	7.6	62.4	6.6	76.4	7.8	56.8	7.2	66.6	6.1	.12	0.44	.20	0.08	91.3	43.5	471.1	157.9	11
12	74.3	9.0	54.1	6.7	64.2	7.0	76.9	8.2	58.4	7.2	67.6	6.3	.57	1.10	.20	0.09	86.6	29.4	413.1	181.2	12
13	73.5	8.0	54.9	7.1	64.2	6.9	76.7	8.3	58.9	5.8	67.8	6.6	.12	0.35	.21	0.10	78.8	35.7	434.4	184.7	13
14	75.1	7.5	52.8	6.7	64.0	6.3	79.6	8.6	58.8	6.7	69.2	6.7	.27	0.59	.21	0.07	65.0	29.0	500.7	130.6	14
15	76.8	7.8	53.0	7.7	64.9	7.0	82.1	7.4	57.9	6.2	70.0	6.1	.02	0.05	.23	0.08	67.3	42.4	556.7	139.6	15
16	77.4	7.0	53.6	9.4	65.5	7.6	82.0	6.8	59.6	5.9	70.8	5.5	.23	0.56	.23	0.07	66.8	25.1	543.8	176.9	16
17	77.1	7.2	57.2	7.8	67.1	6.6	79.3	8.0	61.4	6.6	70.3	6.2	.01	0.04	.20	0.10	78.8	36.7	439.0	198.3	17
18	77.7	6.6	56.8	7.7	67.3	6.2	81.4	6.0	61.8	5.1	71.6	4.3	.15	0.29	.21	0.09	71.2	33.3	426.4	147.1	18
19	77.9	7.3	57.8	7.2	67.8	6.1	82.1	6.5	62.4	4.7	72.3	4.4	.15	0.30	.23	0.07	71.3	29.1	451.3	139.2	19
20	79.2	7.3	57.8	7.7	68.5	6.2	81.5	6.2	62.5	4.9	72.0	4.3	.06	0.21	.22	0.08	75.0	38.2	452.5	175.0	20
21	76.5	6.8	57.3	7.2	66.9	5.8	79.3	6.7	62.7	5.1	71.0	3.9	.21	0.40	.18	0.09	66.8	36.6	433.4	215.6	21
22	79.7	5.3	57.7	6.7	68.7	4.6	81.9	5.9	62.5	5.1	72.2	4.1	.36	0.89	.20	0.10	70.4	45.5	434.0	198.4	22
23	78.2	5.4	60.5	4.7	69.4	4.0	81.4	5.2	64.6	4.5	73.0	3.4	.19	0.35	.21	0.09	77.0	35.2	469.5	185.1	23
24	74.5	6.9	57.9	7.7	66.2	6.6	79.8	5.5	63.3	5.5	71.6	4.0	.08	0.18	.20	0.08	67.1	32.5	472.9	204.7	24
25	75.0	6.5	56.0	6.8	65.5	5.7	80.5	5.9	62.1	6.3	71.3	4.7	.23	0.41	.19	0.09	60.8	31.3	487.2	181.0	25
26	75.1	7.1	55.5	6.8	65.3	5.2	81.0	6.2	61.3	6.4	71.1	4.0	.10	0.17	.19	0.07	69.3	37.2	472.3	195.1	26
27	76.6	6.5	55.6	7.0	66.1	6.1	81.5	6.1	60.6	6.1	71.1	4.9	.33	0.70	.22	0.06	72.0	24.5	545.7	135.6	27
28	77.3	6.2	56.4	7.8	66.8	6.3	83.3	5.2	61.4	6.4	72.4	4.5	.15	0.37	.25	0.07	75.2	28.3	586.3	160.2	28
29	75.6	7.8	57.8	7.0	66.7	6.6	81.1	8.3	62.5	5.9	71.8	5.3	.25	0.59	.20	0.08	66.8	28.5	496.6	236.2	29
30	78.2	6.9	58.2	7.7	68.2	6.3	82.4	8.5	62.9	6.1	72.6	6.2	.20	0.52	.24	0.08	78.3	33.6	507.3	200.6	30
MO. AVG	74.9	7.8	54.0	7.7	64.5	6.8	78.6	7.3	58.9	6.4	68.7	5.7	.17	0.45	.21	0.08	75.5	36.2	474.1	175.8	

Table 5.--Stoneville weather normals for May, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	74.5	6.5	56.9	6.8	65.7	5.4	79.9	5.2	62.8	5.6	71.3	3.4	.24	0.40	.19	0.06	76.1	39.7	423.6	191.5	1
2	74.8	6.5	54.8	6.7	64.8	5.4	80.4	6.7	60.9	4.5	70.7	4.3	.27	0.40	.23	0.09	75.5	34.6	503.7	202.0	2
3	75.3	7.6	54.4	6.5	64.9	6.3	81.0	8.7	61.1	4.8	71.1	6.4	.22	0.55	.22	0.08	62.3	29.7	536.7	186.5	3
4	78.1	5.9	56.4	6.9	67.3	5.1	82.6	6.2	61.4	6.3	72.0	4.8	.21	0.54	.22	0.06	61.5	26.5	519.8	162.8	4
5	79.5	7.5	57.8	5.8	68.6	5.7	83.7	7.0	63.2	5.7	73.4	5.3	.08	0.26	.25	0.09	69.9	28.9	524.7	191.0	5
6	81.3	4.9	60.0	6.1	70.6	5.1	85.0	6.0	64.4	5.5	74.7	4.9	.25	0.73	.22	0.05	68.3	28.1	483.5	158.3	6
7	79.9	7.7	61.2	4.6	70.5	4.8	84.5	8.9	65.8	5.0	75.2	5.9	.28	0.58	.23	0.08	66.3	33.6	471.8	217.0	7
8	82.4	5.1	62.5	5.5	72.5	4.5	86.7	6.2	66.8	5.0	76.8	5.0	.26	0.72	.26	0.07	64.0	19.8	545.1	141.4	8
9	79.5	6.6	60.4	6.4	70.0	5.6	85.7	8.6	66.1	5.9	75.9	6.3	.01	0.03	.23	0.10	64.5	38.7	537.1	178.3	9
10	81.0	6.3	59.4	8.2	70.2	6.9	86.6	7.2	66.2	6.3	76.4	6.3	.18	0.51	.25	0.08	65.8	25.2	532.1	172.2	10
11	82.2	6.6	61.1	8.4	71.6	6.4	87.2	6.5	66.5	6.5	76.9	5.4	.04	0.11	.25	0.09	66.0	27.7	479.2	168.5	11
12	80.0	9.1	61.1	6.8	70.6	6.9	85.8	11.1	66.4	6.2	76.1	7.6	.31	0.59	.22	0.10	65.0	42.0	444.9	209.6	12
13	81.6	7.6	59.5	7.7	70.5	6.7	87.8	8.1	65.9	7.2	76.8	7.1	.28	0.89	.27	0.09	60.2	26.8	608.1	162.6	13
14	83.1	5.9	61.3	6.6	72.2	6.1	90.1	6.1	66.2	7.3	78.2	6.3	.04	0.11	.27	0.08	52.9	26.0	578.3	140.8	14
15	81.9	6.9	60.6	5.6	71.3	5.3	88.3	7.7	67.3	6.9	77.8	5.8	.22	0.38	.25	0.07	64.3	30.9	559.4	180.8	15
16	82.7	7.0	60.3	6.0	71.5	5.7	89.9	7.0	66.8	6.3	78.3	5.6	.07	0.15	.26	0.08	58.9	31.2	577.8	137.1	16
17	82.4	7.1	61.5	5.6	71.9	5.0	88.0	6.7	68.4	5.8	78.2	5.0	.10	0.27	.24	0.09	52.1	20.5	505.5	191.9	17
18	84.4	5.1	62.1	5.7	73.3	4.5	91.8	5.5	68.4	6.2	80.1	4.9	.11	0.25	.27	0.07	50.8	22.2	602.5	111.0	18
19	86.0	5.4	63.0	4.9	74.5	4.5	93.6	5.3	69.4	5.5	81.5	4.6	.05	0.16	.28	0.07	55.7	22.7	583.3	117.8	19
20	85.8	5.4	63.7	4.8	74.7	4.7	93.3	5.9	70.6	5.2	81.9	4.7	.03	0.06	.27	0.07	52.5	24.6	579.2	114.7	20
21	85.8	6.5	64.3	5.4	75.1	4.8	92.4	6.7	71.4	5.5	81.9	4.8	.05	0.11	.27	0.08	52.8	35.1	481.0	177.1	21
22	85.4	7.5	64.1	3.8	74.8	4.8	91.9	8.1	71.2	4.5	81.6	5.0	.22	0.50	.27	0.08	67.4	42.6	550.8	143.8	22
23	85.8	6.3	65.7	6.4	75.8	5.8	92.6	7.8	71.9	5.0	82.3	5.4	.09	0.32	.26	0.07	54.6	21.8	525.6	162.5	23
24	86.0	6.0	64.9	6.3	75.4	5.4	94.3	7.3	71.8	5.2	83.1	5.4	.04	0.12	.27	0.06	48.6	22.3	548.6	126.2	24
25	86.8	5.5	64.6	5.7	75.7	5.1	95.5	6.0	71.5	5.8	83.5	5.3	.09	0.21	.30	0.06	52.0	23.7	587.2	103.7	25
26	85.2	7.7	64.8	4.9	75.0	5.3	92.7	8.0	71.9	5.0	82.3	5.5	.31	0.67	.27	0.08	66.9	45.0	549.1	151.6	26
27	84.7	7.8	63.1	5.9	73.9	6.4	92.5	9.6	71.5	5.5	81.9	6.8	.17	0.58	.24	0.09	43.7	18.4	500.8	135.2	27
28	84.9	6.8	64.1	6.9	74.5	6.0	92.5	8.5	71.3	5.6	81.9	6.4	.17	0.35	.26	0.09	55.5	30.2	524.8	141.0	28
29	86.3	5.0	63.2	6.5	74.7	5.2	94.2	5.4	70.8	5.9	82.5	4.9	.08	0.20	.29	0.06	52.1	16.3	578.3	133.8	29
30	85.4	6.1	64.4	5.1	74.9	4.6	93.5	8.1	71.5	4.6	82.5	5.1	.23	0.61	.26	0.10	49.8	19.9	555.5	153.3	30
31	84.9	7.1	64.5	5.1	74.7	4.7	92.5	8.6	72.3	4.1	82.4	5.1	.09	0.20	.26	0.10	48.3	19.5	488.9	199.3	31
MO. AVG	82.5	6.6	61.5	6.1	72.0	5.5	88.9	7.4	67.8	5.7	78.4	5.5	.15	0.44	.25	0.08	59.5	29.1	531.8	165.1	

Table 6.--Stoneville weather normals for June, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	84.6	5.6	64.9	5.9	74.8	4.9	91.9	7.3	71.9	4.1	81.9	4.8	.16	0.32	.27	0.09	49.8	20.3	522.9	179.1	1
2	84.7	5.5	63.8	5.0	74.2	4.0	91.6	7.0	71.7	3.6	81.7	4.3	.41	0.93	.25	0.08	50.7	21.0	558.1	149.5	2
3	86.3	6.2	64.4	4.5	75.4	4.7	93.8	7.6	71.4	4.3	82.6	5.3	.04	0.09	.27	0.08	39.6	15.1	580.3	137.3	3
4	87.4	6.3	65.7	4.1	76.6	4.4	94.7	8.3	72.5	4.2	83.5	5.6	.00	0.01	.27	0.08	40.0	21.7	579.9	147.6	4
5	88.8	5.2	66.8	4.2	77.8	4.0	95.2	7.9	73.7	4.2	84.4	5.4	.07	0.25	.28	0.07	45.6	18.9	517.2	156.3	5
6	90.0	4.6	68.2	4.1	79.1	3.7	97.3	5.8	73.6	4.1	85.4	4.6	.10	0.31	.30	0.08	55.5	26.0	557.8	102.1	6
7	88.8	4.9	67.4	3.6	78.1	3.4	95.3	5.7	74.8	4.4	85.1	3.9	.05	0.15	.29	0.08	52.5	23.3	514.7	167.2	7
8	90.0	4.8	67.2	4.3	78.6	4.0	98.3	5.3	74.7	2.8	86.5	3.2	.16	0.46	.29	0.07	43.6	16.1	576.4	125.0	8
9	91.3	4.9	68.0	3.9	79.6	3.7	97.6	6.1	75.1	3.5	86.4	4.0	.13	0.31	.28	0.08	43.4	20.8	564.1	128.0	9
10	89.6	5.9	69.6	3.8	79.6	4.2	98.5	7.1	75.8	3.4	87.2	4.3	.13	0.31	.29	0.09	44.5	20.3	573.9	149.5	10
11	90.8	5.0	68.9	4.9	79.8	4.5	99.3	6.7	76.0	3.9	87.7	4.5	.10	0.28	.31	0.08	51.9	23.2	595.1	124.2	11
12	91.8	4.6	70.0	4.3	80.9	3.7	100.5	5.6	76.9	3.9	88.7	3.9	.04	0.10	.31	0.07	44.6	19.5	582.2	93.4	12
13	90.5	4.8	69.7	4.2	80.1	3.7	99.7	6.4	77.2	4.0	88.5	3.9	.02	0.05	.30	0.09	41.4	15.5	576.0	140.5	13
14	89.9	6.5	69.4	3.7	79.7	4.5	98.2	8.2	76.5	3.8	87.3	5.2	.16	0.40	.29	0.10	45.5	16.1	553.4	157.8	14
15	89.1	5.7	67.5	5.7	78.3	4.9	96.9	8.2	75.9	4.0	86.4	5.3	.12	0.25	.30	0.09	54.3	30.8	529.8	159.2	15
16	87.5	7.9	68.4	4.9	78.0	5.9	95.8	9.3	75.7	3.8	85.8	5.8	.24	0.57	.26	0.10	53.9	23.0	530.4	142.2	16
17	88.1	7.0	67.8	4.6	78.0	5.3	97.2	9.0	75.7	4.0	86.4	6.2	.10	0.20	.28	0.09	51.3	25.6	581.6	100.7	17
18	90.5	6.0	69.6	4.8	80.1	4.9	99.1	8.6	76.8	4.2	88.0	5.9	.01	0.03	.29	0.10	47.4	18.8	557.8	150.6	18
19	89.5	6.2	69.6	5.4	79.5	4.8	98.4	8.9	77.2	4.3	87.8	6.0	.17	0.42	.27	0.12	46.1	19.4	541.6	152.4	19
20	89.8	5.7	68.9	5.0	79.3	4.7	99.4	8.7	76.6	4.6	88.0	6.3	.34	0.77	.28	0.09	46.3	23.5	601.9	130.0	20
21	89.6	5.5	70.0	4.7	79.8	4.2	97.0	8.2	77.4	5.0	87.2	6.2	.05	0.11	.29	0.06	44.3	13.8	534.8	138.5	21
22	90.4	4.6	69.2	5.3	79.8	4.5	99.6	7.4	76.5	4.9	88.1	5.9	.26	0.59	.28	0.07	45.6	15.2	545.4	103.0	22
23	90.8	4.1	70.8	4.0	80.8	3.4	98.8	7.0	77.1	5.0	88.0	5.3	.07	0.17	.29	0.05	50.8	21.3	554.2	89.3	23
24	90.0	5.4	71.5	4.0	80.8	4.2	98.4	7.7	78.0	3.7	88.2	5.3	.06	0.18	.30	0.10	54.6	22.9	524.6	177.8	24
25	89.6	5.9	70.5	5.2	80.1	5.0	98.4	9.0	78.5	3.9	88.4	5.8	.14	0.30	.28	0.10	50.8	21.6	565.4	129.9	25
26	89.7	5.3	69.0	4.8	79.4	4.6	96.8	7.4	77.4	4.1	87.1	5.4	.22	0.44	.28	0.09	49.8	19.6	559.9	121.7	26
27	90.6	4.6	70.6	5.1	80.6	4.6	98.6	6.6	77.6	4.4	88.1	4.9	.01	0.03	.28	0.08	44.4	20.1	564.4	131.4	27
28	92.3	3.3	70.3	4.3	81.3	3.6	101.1	5.1	77.6	4.3	89.3	4.1	.05	0.19	.31	0.08	43.7	22.4	597.3	101.6	28
29	93.1	3.9	71.1	3.7	82.1	3.5	101.6	7.3	78.8	3.3	90.2	4.5	.07	0.21	.29	0.09	40.1	18.4	548.6	111.3	29
30	92.6	4.0	71.3	3.7	81.9	3.6	102.0	6.6	78.8	3.4	90.4	4.6	.20	0.34	.31	0.05	39.8	21.1	582.7	80.9	30
MO. AVG	89.6	5.4	68.7	4.6	79.1	4.4	97.7	7.4	75.9	4.1	86.8	5.1	.12	0.36	.29	0.08	47.1	20.8	559.1	135.1	

Table 7.--Stoneville weather normals for July, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	92.5	3.2	71.3	3.4	81.9	2.8	101.4	7.4	79.1	3.3	90.3	5.0	.22	0.47	.28	0.06	37.3	12.6	542.4	103.6	1
2	91.8	4.8	72.3	3.2	82.0	3.6	101.4	7.2	79.8	3.1	90.6	4.8	.18	0.42	.28	0.08	40.4	13.5	509.4	118.6	2
3	92.4	4.8	72.0	3.0	82.2	3.5	101.7	8.2	80.1	3.6	90.9	5.3	.21	0.42	.30	0.05	42.5	22.2	577.0	108.1	3
4	92.5	6.0	71.4	5.4	82.0	4.8	100.8	8.9	79.5	4.7	90.1	6.1	.16	0.48	.29	0.07	41.3	15.9	542.1	156.4	4
5	91.9	6.5	70.3	5.4	81.1	5.0	101.8	8.3	78.4	5.5	90.1	6.1	.08	0.34	.27	0.06	36.1	14.5	603.9	103.4	5
6	90.8	6.4	70.7	4.8	80.8	5.2	100.8	9.3	78.9	5.2	89.8	6.7	.07	0.15	.28	0.07	39.1	11.5	561.6	151.6	6
7	91.8	5.4	71.1	5.0	81.5	4.7	102.5	8.8	79.4	5.6	91.0	6.6	.08	0.26	.28	0.09	42.8	17.9	563.3	132.9	7
8	91.4	5.3	71.4	4.3	81.4	4.3	100.9	8.2	79.3	5.0	90.1	5.9	.07	0.16	.28	0.12	37.0	11.9	533.9	145.7	8
9	91.9	4.0	71.3	4.0	81.6	3.6	101.3	7.1	79.4	4.5	90.3	5.2	.29	0.57	.27	0.06	43.5	18.6	560.6	89.4	9
10	92.3	4.7	71.3	5.2	81.8	4.7	102.7	6.8	79.3	4.5	91.0	5.0	.05	0.15	.29	0.08	40.6	15.0	570.6	89.8	10
11	91.3	5.8	71.3	3.7	81.3	4.0	101.4	8.1	79.8	4.3	90.6	5.5	.02	0.05	.27	0.07	44.8	23.4	525.9	127.2	11
12	92.9	4.4	71.5	4.1	82.3	3.8	103.2	6.5	80.0	4.6	91.5	4.9	.06	0.23	.29	0.07	43.1	19.4	568.8	106.2	12
13	92.8	5.2	71.8	3.5	82.3	4.0	103.1	7.6	80.1	4.8	91.6	5.8	.06	0.13	.28	0.07	42.4	12.3	584.3	107.4	13
14	91.4	5.7	70.3	5.0	80.9	4.9	103.7	9.3	80.0	5.1	91.8	6.6	.21	0.48	.29	0.06	42.1	19.0	588.8	87.5	14
15	91.8	5.1	70.3	4.8	81.1	4.6	102.8	7.3	79.8	5.5	91.3	5.9	.12	0.27	.27	0.09	38.8	14.1	551.4	64.1	15
16	91.6	4.6	71.0	4.8	81.3	4.2	102.3	7.9	79.9	5.1	91.1	6.0	.22	0.75	.25	0.08	38.8	18.6	549.3	125.2	16
17	91.8	3.3	70.7	2.6	81.3	2.5	102.6	6.7	79.9	4.1	91.3	4.7	.26	0.63	.28	0.06	39.8	18.2	580.6	115.7	17
18	92.3	3.9	70.5	3.8	81.4	3.1	103.1	6.7	79.8	3.8	91.5	4.3	.01	0.03	.28	0.07	34.4	14.5	569.3	129.8	18
19	92.6	4.4	72.1	3.1	82.4	3.1	103.3	6.6	80.6	3.6	91.9	4.5	.03	0.07	.27	0.08	32.8	13.5	523.1	131.9	19
20	92.3	4.6	72.0	3.0	82.1	2.9	102.6	6.7	81.0	3.0	91.8	4.0	.14	0.33	.27	0.07	36.8	16.5	536.6	128.4	20
21	92.0	6.6	71.2	3.2	81.6	4.6	103.4	8.2	81.0	3.9	92.2	5.4	.05	0.11	.28	0.08	40.6	18.1	554.6	131.6	21
22	92.3	6.3	71.2	3.7	81.7	4.6	103.8	7.8	81.3	4.3	92.5	5.5	.02	0.05	.26	0.08	35.8	14.6	527.6	165.4	22
23	91.5	5.1	72.4	3.1	82.0	3.6	101.6	7.6	79.4	9.1	90.5	6.4	.11	0.21	.23	0.06	32.9	15.6	473.3	138.2	23
24	91.8	5.1	72.4	2.7	82.1	3.5	100.8	7.7	81.1	3.9	90.9	5.4	.16	0.35	.25	0.08	40.5	23.3	502.0	128.3	24
25	90.6	5.2	72.5	2.7	81.6	3.3	99.3	7.6	80.6	3.6	89.9	4.9	.22	0.53	.23	0.09	36.8	13.2	494.1	161.3	25
26	90.9	4.8	72.8	2.0	81.9	2.9	98.0	8.3	80.4	3.1	89.2	5.0	.47	1.05	.22	0.08	39.9	16.3	438.4	144.7	26
27	90.9	3.8	71.7	2.6	81.3	2.8	100.3	7.1	79.8	2.9	90.0	4.7	.19	0.34	.26	0.06	38.9	20.4	527.0	97.7	27
28	91.7	3.1	72.6	2.4	82.1	2.4	101.8	7.1	80.2	2.6	91.0	4.6	.06	0.18	.25	0.08	40.4	12.8	549.4	95.2	28
29	90.5	4.0	72.3	2.2	81.4	2.8	100.2	6.5	80.8	3.2	90.5	4.5	.15	0.42	.25	0.09	44.2	19.6	511.9	126.8	29
30	89.9	6.1	71.4	2.8	80.6	3.8	97.7	8.6	79.8	3.5	88.8	5.7	.15	0.36	.25	0.08	43.8	22.5	486.3	165.6	30
31	90.3	5.2	70.8	4.3	80.6	4.2	99.0	7.7	79.1	5.1	89.1	6.0	.09	0.29	.24	0.09	39.3	12.4	486.7	128.1	31
MO. AVG	91.7	5.0	71.5	3.8	81.6	3.9	101.6	7.7	79.9	4.5	90.8	5.4	.14	0.40	.27	0.08	39.6	16.9	538.5	125.2	

Table 8.--Stoneville weather normals for August, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	90.6	5.0	71.3	2.8	81.0	2.9	98.6	8.0	79.4	4.2	89.0	5.5	.08	0.20	.25	0.07	39.1	15.5	471.6	117.0	1
2	89.8	4.6	70.9	3.5	80.4	3.3	98.8	8.0	79.9	4.6	89.4	5.3	.04	0.15	.24	0.09	39.2	15.6	487.6	188.9	2
3	90.3	4.7	69.8	4.4	80.1	4.0	100.3	7.6	78.4	4.8	89.3	5.5	.10	0.19	.25	0.08	35.7	15.1	550.9	145.2	3
4	91.0	4.8	69.6	4.0	80.3	3.8	100.9	6.6	78.4	4.1	89.7	5.0	.08	0.20	.25	0.06	38.3	14.1	557.1	95.9	4
5	91.4	3.9	70.1	4.6	80.8	3.7	102.6	5.5	79.3	4.1	90.9	4.2	.00	0.00	.27	0.06	38.6	11.3	538.5	123.8	5
6	92.1	3.6	69.9	3.7	81.0	3.3	103.9	5.3	79.0	3.9	91.4	4.0	.18	0.43	.27	0.06	34.4	14.6	575.7	83.7	6
7	91.9	3.8	71.2	3.1	81.5	3.1	103.0	5.8	80.7	3.5	91.8	4.0	.03	0.09	.24	0.06	34.8	14.6	509.3	114.3	7
8	91.8	3.9	70.7	3.9	81.3	3.2	102.0	6.2	80.4	3.4	91.2	4.3	.16	0.49	.26	0.07	32.9	13.2	535.3	145.0	8
9	92.1	3.9	71.1	3.9	81.6	3.4	102.5	6.2	80.6	3.4	91.6	4.7	.14	0.55	.28	0.08	35.5	13.0	541.4	85.4	9
10	89.8	4.5	71.1	3.7	80.5	2.6	99.9	6.9	80.6	3.1	90.3	4.4	.15	0.45	.24	0.09	42.9	17.1	494.7	146.9	10
11	89.7	4.4	69.7	3.6	79.7	3.3	99.6	6.4	79.8	3.7	89.7	4.1	.14	0.24	.25	0.07	40.1	24.1	489.1	117.3	11
12	89.7	5.3	69.2	4.4	79.4	4.3	99.3	7.3	78.6	4.5	89.0	5.4	.06	0.15	.25	0.06	40.5	20.2	497.7	90.5	12
13	89.3	3.9	68.4	5.3	78.8	4.1	99.0	5.3	77.9	4.8	88.5	4.6	.13	0.32	.22	0.06	34.7	15.7	522.1	106.4	13
14	89.6	3.9	68.4	4.1	79.0	3.2	99.7	7.0	77.4	5.3	88.5	5.2	.07	0.18	.22	0.08	39.5	17.7	551.8	98.1	14
15	90.3	3.7	69.0	4.1	79.7	3.6	100.0	5.8	78.4	4.5	89.2	4.6	.01	0.04	.27	0.06	36.1	16.9	536.4	85.9	15
16	90.5	5.0	69.4	4.4	80.0	4.0	100.7	6.2	79.4	4.0	90.0	4.4	.14	0.47	.22	0.08	36.6	15.5	509.4	144.6	16
17	91.3	4.1	70.0	4.3	80.7	3.6	100.9	4.8	79.3	4.1	90.1	3.9	.02	0.06	.24	0.07	34.5	17.7	499.9	118.0	17
18	89.5	4.9	69.3	4.0	79.4	2.9	98.4	8.0	79.2	3.3	88.8	4.7	.06	0.12	.21	0.08	34.4	22.4	450.9	170.4	18
19	91.6	3.8	69.1	3.8	80.3	3.3	101.5	6.5	79.2	4.6	90.4	4.8	.12	0.25	.24	0.05	29.6	12.3	523.1	80.3	19
20	90.9	3.5	70.5	3.1	80.7	2.9	101.4	5.3	79.5	3.8	90.5	3.9	.01	0.04	.24	0.06	34.5	12.7	540.6	98.6	20
21	91.5	3.8	70.0	4.2	80.8	3.7	101.6	5.7	79.4	3.9	90.5	4.2	.08	0.22	.23	0.07	34.8	17.4	520.4	81.4	21
22	89.5	4.8	68.8	5.0	79.1	4.0	99.2	8.1	79.3	3.3	89.3	4.9	.10	0.32	.23	0.06	34.8	20.2	476.4	95.1	22
23	88.8	5.5	69.4	3.8	79.1	3.1	98.8	8.4	78.5	3.4	88.6	5.0	.14	0.39	.20	0.07	29.3	21.4	483.9	142.1	23
24	90.2	4.6	68.8	3.5	79.5	3.8	99.7	6.1	78.1	3.3	88.9	4.3	.09	0.22	.22	0.06	34.5	21.3	494.3	50.3	24
25	90.2	4.9	68.9	3.6	79.5	3.8	99.4	6.4	78.0	3.5	88.7	4.6	.08	0.26	.22	0.06	32.5	11.1	503.6	82.4	25
26	90.0	4.7	68.6	4.3	79.3	4.0	99.5	5.9	78.2	3.8	88.9	4.4	.08	0.33	.25	0.05	36.3	19.0	495.8	92.2	26
27	90.2	3.5	67.9	4.6	79.0	3.7	99.8	5.6	77.8	3.7	88.8	4.3	.04	0.09	.24	0.05	36.6	19.2	497.2	85.7	27
28	89.9	4.5	67.5	5.5	78.7	4.4	99.8	4.5	77.6	4.4	88.7	3.6	.05	0.13	.23	0.05	36.6	20.1	493.7	114.2	28
29	88.3	3.7	67.3	5.7	77.8	3.9	96.6	7.1	76.6	3.5	86.6	4.0	.15	0.38	.21	0.07	39.6	31.6	481.6	155.0	29
30	89.1	4.8	67.8	4.3	78.4	3.3	96.8	6.6	77.9	5.2	87.4	4.3	.14	0.24	.21	0.06	33.8	11.9	489.4	149.1	30
31	88.4	6.4	67.4	3.0	77.9	3.9	95.4	7.7	76.9	3.2	86.2	5.1	.08	0.25	.21	0.05	39.7	22.0	456.8	151.9	31
MO. AVG	90.3	4.5	69.4	4.1	79.9	3.6	100.0	6.6	78.8	4.0	89.4	4.6	.09	0.28	.24	0.07	36.2	17.8	508.9	119.0	

Table 9.--Stoneville weather normals for September, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	88.1	5.6	67.3	4.5	77.8	4.4	94.8	7.6	76.2	4.3	85.5	5.4	.15	0.58	.21	0.06	36.6	17.9	428.6	134.7	1
2	88.9	5.3	67.6	4.8	78.3	3.9	95.3	7.8	75.8	4.8	85.5	5.7	.13	0.44	.19	0.07	33.9	17.4	420.9	151.3	2
3	87.6	8.6	68.8	4.2	78.2	5.9	93.8	10.5	76.3	4.1	85.1	6.8	.18	0.34	.19	0.08	34.5	16.0	380.1	162.5	3
4	87.8	6.7	68.8	5.5	78.3	5.6	93.8	8.7	76.3	5.1	85.1	6.5	.18	0.40	.18	0.06	39.3	17.4	409.5	149.4	4
5	87.8	5.7	68.9	4.9	78.3	4.7	94.0	8.2	76.5	5.2	85.3	6.2	.13	0.44	.19	0.06	47.9	20.2	436.8	134.3	5
6	87.5	6.4	68.0	4.2	77.8	4.6	93.5	8.8	76.3	4.3	84.9	6.0	.12	0.46	.19	0.07	44.4	24.9	419.8	162.3	6
7	87.4	6.0	67.2	4.6	77.3	4.6	93.8	8.0	75.5	5.1	84.6	5.9	.05	0.13	.19	0.08	36.5	21.3	433.9	128.6	7
8	88.9	5.0	66.9	4.8	77.9	4.2	94.9	6.8	75.6	3.7	85.3	4.7	.02	0.03	.22	0.06	42.5	25.4	471.1	112.4	8
9	88.6	4.5	67.0	5.1	77.8	3.9	94.1	6.1	75.9	3.5	85.0	4.2	.09	0.26	.23	0.04	45.5	19.8	473.8	109.5	9
10	85.6	6.5	66.8	5.6	76.2	5.1	92.5	7.0	74.9	4.7	83.8	5.2	.27	0.64	.20	0.08	62.3	38.9	451.2	136.0	10
11	85.5	5.9	65.2	6.0	75.4	5.3	92.0	6.5	73.4	5.3	82.8	4.8	.23	0.71	.19	0.09	46.5	32.2	434.4	144.8	11
12	86.8	5.2	64.8	6.5	75.8	4.9	92.6	6.6	72.5	5.4	82.6	4.7	.06	0.14	.21	0.07	51.7	34.9	446.8	148.3	12
13	85.0	6.8	64.4	7.1	74.7	5.9	91.1	7.1	72.3	5.3	81.8	4.4	.03	0.09	.19	0.07	49.8	28.8	415.4	164.5	13
14	83.4	7.8	62.8	7.6	73.1	6.6	89.3	8.6	72.5	4.1	80.9	5.3	.20	0.43	.17	0.06	42.7	20.1	437.4	120.2	14
15	83.5	7.5	62.2	6.6	72.8	6.0	89.1	8.4	71.3	4.7	80.3	5.8	.07	0.16	.18	0.08	48.3	24.8	398.6	154.3	15
16	83.3	6.7	64.2	6.9	73.8	5.9	88.2	7.8	71.7	4.5	79.9	5.3	.16	0.57	.16	0.07	45.4	21.8	392.6	151.2	16
17	84.3	5.2	64.3	6.2	74.3	4.8	88.8	6.6	71.6	4.7	80.2	4.8	.03	0.08	.16	0.06	44.5	21.8	371.1	138.1	17
18	85.7	5.5	64.4	6.0	75.0	5.4	91.8	5.7	71.4	4.6	81.5	4.5	.10	0.27	.20	0.05	35.6	17.9	461.7	103.0	18
19	85.9	5.5	64.3	6.3	75.1	4.9	91.4	6.3	72.6	4.5	82.0	4.6	.04	0.18	.19	0.06	36.2	19.5	407.8	141.1	19
20	84.3	7.8	63.6	6.3	73.9	6.2	88.7	9.8	71.6	5.1	80.2	6.9	.17	0.46	.18	0.06	46.4	31.7	375.9	159.8	20
21	84.9	7.4	63.8	7.1	74.3	5.9	89.3	9.4	71.4	6.5	80.4	7.1	.16	0.69	.18	0.06	47.8	26.4	394.8	131.0	21
22	83.3	6.9	61.3	6.3	72.3	5.8	89.0	8.7	70.6	5.8	79.8	6.6	.06	0.20	.18	0.06	47.1	34.4	414.6	128.4	22
23	83.7	5.8	60.8	7.0	72.2	6.0	88.7	6.8	69.3	6.9	79.0	6.5	.03	0.10	.19	0.05	49.4	28.4	413.3	96.0	23
24	82.9	6.4	59.7	7.1	71.3	6.0	87.5	7.5	69.3	5.6	78.4	5.9	.01	0.03	.19	0.06	47.4	25.8	410.6	150.8	24
25	82.8	7.6	59.6	8.2	71.2	7.1	87.3	7.2	68.4	6.2	77.8	5.8	.14	0.35	.18	0.06	47.4	23.5	412.1	148.4	25
26	82.1	7.5	61.0	7.6	71.6	6.6	86.8	7.0	68.8	5.8	77.8	5.4	.10	0.24	.17	0.06	47.5	22.6	402.8	116.9	26
27	81.1	6.8	62.0	7.9	71.6	6.1	84.3	6.3	68.8	5.3	76.5	4.9	.06	0.11	.13	0.06	52.1	32.1	319.7	115.5	27
28	78.6	8.1	59.3	7.7	69.0	7.1	83.8	6.9	67.6	5.7	75.7	5.2	.15	0.45	.16	0.07	52.4	23.7	361.8	131.9	28
29	80.2	7.4	57.5	8.2	68.9	6.8	84.3	7.0	66.2	5.5	75.3	5.3	.13	0.24	.16	0.06	40.6	25.8	391.8	153.4	29
30	82.4	6.6	57.5	7.5	69.9	6.2	86.1	5.8	65.6	5.7	75.8	5.2	.03	0.08	.17	0.04	43.8	32.2	414.8	104.0	30
MO. AVG	85.0	6.6	64.0	6.4	74.5	5.6	90.4	7.6	72.2	5.1	81.3	5.6	.11	0.37	.18	0.06	44.9	25.6	413.4	137.4	

Table 10.--Stoneville weather normals for October, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	80.6	7.9	57.3	7.2	68.9	6.4	85.3	6.6	65.8	6.2	75.6	5.0	.08	0.29	.17	0.05	46.1	32.3	417.1	104.3	1
2	80.1	9.1	55.1	7.0	67.6	6.8	85.1	6.8	64.2	5.9	74.6	5.0	.01	0.03	.17	0.04	44.4	30.4	442.0	81.8	2
3	81.4	7.9	54.4	8.7	67.9	7.2	85.1	6.9	64.0	6.1	74.5	5.5	.02	0.08	.19	0.06	46.1	30.7	402.2	127.5	3
4	80.5	8.5	54.1	7.3	67.3	6.9	84.5	7.4	63.8	5.7	74.2	5.7	.03	0.11	.19	0.05	46.4	34.9	414.2	115.2	4
5	78.8	7.0	53.6	7.7	66.3	6.1	81.1	8.4	63.3	6.2	72.2	6.2	.04	0.08	.17	0.05	45.5	26.0	397.3	124.6	5
6	76.8	8.0	53.3	7.7	65.0	6.9	81.3	6.7	63.5	6.2	72.4	5.4	.20	0.43	.15	0.06	45.4	16.7	364.8	155.6	6
7	77.8	7.8	54.9	9.4	66.3	7.2	81.8	5.6	63.9	6.1	72.8	4.7	.09	0.25	.15	0.06	40.1	18.9	360.7	127.4	7
8	78.4	8.6	54.3	7.3	66.3	6.4	81.2	6.9	62.1	5.2	71.7	5.0	.12	0.33	.15	0.07	44.0	28.1	361.4	141.3	8
9	78.9	8.8	54.9	7.8	66.9	7.6	82.4	5.7	62.4	5.7	72.4	5.0	.13	0.32	.15	0.04	43.0	21.6	397.5	116.2	9
10	77.8	8.9	51.6	8.8	64.7	8.0	81.5	6.2	61.6	6.9	71.5	5.8	.02	0.09	.16	0.06	38.8	20.5	428.6	101.0	10
11	81.0	8.4	52.6	10.2	66.8	8.3	82.0	7.0	61.6	6.9	71.8	6.2	.01	0.07	.16	0.04	41.2	23.6	381.3	124.0	11
12	83.2	7.1	54.9	9.4	69.0	7.5	83.8	5.9	62.3	7.7	73.0	6.1	.13	0.55	.17	0.05	38.4	27.1	395.6	79.2	12
13	79.5	7.6	56.9	8.3	68.3	6.3	81.0	5.9	64.2	7.4	72.6	5.4	.11	0.44	.14	0.05	43.3	35.0	297.6	146.2	13
14	78.4	9.6	55.5	9.1	67.0	8.0	80.3	7.6	63.4	7.1	71.8	6.2	.07	0.14	.15	0.07	52.3	31.4	358.1	136.8	14
15	76.4	9.5	53.9	10.2	65.2	8.4	79.4	7.9	62.9	7.2	71.1	6.2	.12	0.33	.13	0.06	49.0	22.1	320.2	132.8	15
16	74.4	9.1	53.0	9.7	63.7	7.9	76.9	7.0	61.1	7.1	69.0	5.8	.12	0.34	.13	0.04	60.6	31.4	349.0	168.4	16
17	74.1	10.0	50.3	9.4	62.2	8.6	76.5	7.6	59.3	7.5	67.9	6.8	.09	0.21	.15	0.04	49.8	27.1	383.9	108.4	17
18	76.5	8.6	48.9	8.4	62.7	7.4	77.8	6.9	58.5	7.7	68.2	6.6	.09	0.30	.15	0.05	48.4	31.8	384.8	95.0	18
19	73.8	9.5	47.8	7.6	60.8	6.8	75.1	8.1	57.8	6.6	66.4	6.1	.02	0.04	.13	0.05	50.3	34.3	336.0	128.6	19
20	74.0	9.8	45.8	7.3	59.9	7.6	75.6	6.1	55.9	6.5	65.8	5.7	.05	0.17	.14	0.05	42.4	29.2	360.7	111.3	20
21	76.3	7.3	47.3	9.1	61.8	7.3	76.5	6.0	56.5	7.8	66.5	6.3	.06	0.25	.14	0.05	43.3	32.5	391.4	77.8	21
22	76.6	6.1	48.7	8.3	62.7	5.5	76.0	6.0	57.3	6.4	66.7	5.2	.00	0.01	.14	0.06	37.9	18.1	345.9	119.4	22
23	75.9	6.2	48.6	6.6	62.3	5.2	75.4	4.1	57.3	4.2	66.3	3.5	.11	0.42	.14	0.04	57.3	27.9	353.4	96.1	23
24	72.7	8.6	50.0	6.7	61.3	6.5	73.8	6.6	57.9	4.7	65.8	4.8	.05	0.18	.13	0.05	48.9	31.1	308.9	125.5	24
25	71.9	9.5	47.8	7.9	59.9	6.8	73.3	8.4	56.8	5.9	65.1	5.8	.09	0.26	.12	0.04	39.3	20.1	325.3	145.0	25
26	72.2	8.4	47.4	7.9	59.8	7.1	73.1	8.3	55.4	6.7	64.3	6.8	.07	0.20	.13	0.04	40.8	21.0	340.0	106.0	26
27	72.9	8.1	47.8	8.0	60.4	6.6	73.1	7.8	55.7	7.1	64.4	7.0	.09	0.37	.13	0.05	50.0	33.7	336.4	122.8	27
28	71.9	9.0	47.4	7.8	59.7	6.7	72.8	7.1	55.9	6.6	64.3	6.0	.03	0.10	.11	0.04	49.6	28.6	291.6	117.7	28
29	71.8	9.1	47.3	8.1	59.6	7.5	72.3	8.5	55.1	6.7	63.7	6.9	.15	0.56	.12	0.06	52.8	37.7	317.3	125.0	29
30	73.7	7.2	49.3	8.7	61.5	6.5	72.4	7.4	55.9	6.2	64.1	5.8	.10	0.24	.11	0.05	55.5	37.7	293.4	133.6	30
31	73.4	8.8	49.4	9.6	61.4	7.4	73.1	7.1	56.3	5.7	64.7	5.4	.22	0.48	.13	0.09	70.8	44.7	303.3	123.8	31
MO. AVG	76.5	8.4	51.4	8.3	64.0	7.1	78.4	7.0	60.1	6.5	69.2	5.8	.08	0.29	.15	0.05	47.2	28.9	360.0	121.7	

Table 11.--Stoneville weather normals for November, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	72.1	10.5	49.6	9.5	60.8	9.0	71.1	7.5	56.4	6.8	63.8	6.5	.05	0.18	.12	0.04	69.5	46.0	300.2	122.7	1
2	71.3	11.5	47.6	10.5	59.5	10.1	70.4	8.3	54.8	7.7	62.6	7.3	.13	0.34	.13	0.06	56.4	30.3	301.9	121.2	2
3	65.4	10.1	47.0	9.6	56.2	8.5	67.5	7.1	54.3	7.7	60.9	6.6	.19	0.60	.12	0.06	36.8	26.9	288.1	122.1	3
4	65.9	8.6	44.0	10.2	55.0	8.4	66.3	6.1	51.8	7.7	59.0	6.2	.09	0.22	.09	0.06	43.3	23.5	272.0	128.1	4
5	65.7	10.1	44.1	9.7	54.9	8.5	67.3	7.4	51.4	7.7	59.4	6.6	.25	0.46	.11	0.04	42.5	13.8	280.1	141.2	5
6	67.5	7.2	45.9	9.9	56.8	7.2	67.1	5.1	52.2	8.7	59.6	6.1	.11	0.27	.11	0.06	67.6	34.8	255.0	126.6	6
7	65.3	9.4	45.9	9.7	55.6	8.8	66.0	7.3	52.1	7.5	59.0	6.4	.31	0.89	.09	0.02	51.1	21.9	255.9	122.4	7
8	66.3	8.1	44.1	10.2	55.2	8.6	65.8	6.0	50.5	7.9	58.1	6.4	.03	0.07	.14	0.07	60.1	37.2	296.2	121.1	8
9	65.6	7.4	44.1	10.8	54.9	7.7	65.1	5.6	51.6	6.8	58.4	5.6	.19	0.38	.10	0.05	84.4	53.9	272.9	105.8	9
10	64.9	9.8	42.0	8.2	53.5	7.4	64.5	6.2	48.9	7.4	56.7	6.0	.23	0.56	.13	0.04	60.3	28.2	310.9	99.9	10
11	64.3	11.0	41.9	7.8	53.1	7.4	62.9	6.8	48.2	6.3	55.6	5.4	.08	0.28	.09	0.06	62.6	39.5	234.9	126.7	11
12	64.3	9.5	43.1	8.4	53.7	8.1	64.6	6.9	48.8	7.3	56.7	6.5	.15	0.31	.14	0.06	71.8	41.6	311.6	94.0	12
13	64.8	10.2	42.1	9.3	53.4	8.8	63.3	7.2	47.7	7.5	55.5	6.8	.12	0.39	.12	0.05	58.0	24.3	274.1	96.3	13
14	62.3	12.7	43.6	10.7	53.0	10.6	62.1	8.4	49.2	7.9	55.7	7.3	.11	0.27	.08	0.05	46.1	18.3	239.9	115.5	14
15	65.6	11.9	44.0	11.6	54.8	10.6	63.0	8.7	49.1	8.1	56.1	7.5	.03	0.12	.09	0.05	54.3	39.4	236.2	128.2	15
16	66.9	10.5	43.8	9.8	55.4	9.1	64.4	7.9	49.0	8.9	56.7	7.6	.11	0.23	.09	0.04	56.4	42.7	257.1	121.4	16
17	64.6	10.4	43.5	7.5	54.1	7.9	63.3	7.7	49.0	7.5	56.1	6.8	.12	0.30	.12	0.04	42.3	20.0	244.8	136.6	17
18	64.3	9.3	43.7	8.8	54.0	7.5	63.2	6.6	49.3	7.1	56.3	5.8	.35	0.77	.09	0.03	49.5	24.3	231.5	156.2	18
19	62.8	11.4	42.3	7.1	52.6	8.1	61.6	7.0	49.0	6.6	55.3	5.9	.40	0.98	.08	0.04	70.9	25.1	223.3	104.1	19
20	62.1	9.5	44.3	7.5	53.2	7.5	61.3	6.8	48.8	5.3	55.0	5.3	.13	0.25	.11	0.06	75.0	43.5	233.6	122.9	20
21	62.0	11.5	42.3	8.1	52.1	8.7	60.3	7.1	47.1	6.4	53.8	6.0	.16	0.34	.08	0.05	95.5	40.4	241.0	136.2	21
22	60.3	12.1	43.3	10.8	51.8	10.6	58.8	8.3	47.4	8.3	53.1	7.7	.08	0.29	.06	0.10	65.0	32.7	206.1	108.8	22
23	59.8	11.2	40.9	9.8	50.4	9.8	58.8	7.9	47.0	7.4	52.9	7.2	.34	0.65	.05	0.05	53.5	22.2	203.0	102.3	23
24	60.6	11.3	41.0	11.6	50.8	10.7	59.7	7.7	47.0	8.4	53.3	7.7	.05	0.15	.08	0.05	56.3	23.8	204.8	124.9	24
25	60.8	10.0	40.3	9.7	50.5	8.9	59.6	7.4	45.8	7.2	52.7	7.0	.15	0.32	.07	0.06	72.3	41.7	217.5	108.0	25
26	66.0	9.5	41.8	9.1	53.9	8.5	61.0	7.6	46.5	7.6	53.8	7.2	.06	0.12	.04	0.03	78.6	29.7	227.0	121.7	26
27	62.4	8.7	44.8	9.8	53.6	8.0	59.9	5.5	47.7	8.1	53.8	5.9	.36	1.01	.08	0.05	86.3	53.6	166.6	106.4	27
28	54.8	11.8	39.6	8.9	47.2	9.5	55.5	8.6	46.3	7.0	50.9	7.4	.51	1.20	.06	0.07	82.9	35.9	237.3	119.5	28
29	55.9	10.8	36.8	8.3	46.3	9.2	55.9	6.8	43.2	6.0	49.5	5.5	.23	0.46	.08	0.05	72.4	35.8	263.4	127.9	29
30	53.7	10.5	35.8	9.7	44.7	9.4	54.8	7.7	43.2	6.8	49.0	6.5	.13	0.32	.06	0.06	75.3	31.0	259.4	122.8	30
MO. AVG	63.6	10.3	43.1	9.5	53.4	8.8	62.9	7.2	49.1	7.4	56.0	6.6	.18	0.51	.09	0.05	63.2	34.3	251.5	120.4	

Table 12.--Stoneville weather normals for December, 1960-79

DAY	AIR TEMPERATURE						2 INCH SOIL TEMPERATURE						PRECIP		EVAP		WIND		SOLAR RADIATION		DAY
	MAX		MIN		MEAN		MAX		MIN		MEAN										
	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	AVG	SD	
1	57.4	9.2	34.1	8.8	45.8	7.9	55.5	7.7	41.8	6.5	48.6	6.6	.14	0.49	.06	0.03	58.2	25.5	264.6	97.6	1
2	60.0	11.0	36.4	9.0	48.2	9.0	56.7	9.2	41.6	7.2	49.2	7.6	.01	0.04	.09	0.02	82.5	55.9	264.9	83.9	2
3	61.9	11.0	39.7	9.4	50.8	9.2	57.4	8.3	43.0	7.5	50.2	7.3	.14	0.45	.05	0.04	70.8	62.5	220.6	105.8	3
4	59.8	10.8	38.4	9.4	49.1	8.7	57.1	7.0	43.7	7.5	50.4	6.6	.23	0.67	.07	0.05	68.3	70.4	230.6	114.9	4
5	59.4	9.6	38.5	7.6	48.9	6.5	56.9	6.5	44.2	7.2	50.6	6.2	.04	0.12	.06	0.04	82.3	43.5	235.8	95.8	5
6	54.9	10.3	37.8	6.5	46.3	7.6	54.6	5.9	43.3	5.8	48.9	5.1	.24	0.40	.07	0.03	92.2	36.0	207.2	134.1	6
7	54.5	11.3	37.0	10.9	45.8	9.8	53.7	7.8	43.4	6.5	48.6	6.5	.23	0.46	.07	0.05	75.7	36.1	199.1	119.0	7
8	53.7	9.7	36.0	10.1	44.9	8.1	52.4	6.5	42.5	8.4	47.4	6.9	.03	0.07	.10	0.07	98.2	69.6	204.8	133.3	8
9	52.8	10.7	34.1	7.6	43.4	7.6	52.0	6.1	41.0	7.4	46.5	6.0	.34	0.72	.06	0.02	59.5	42.2	210.6	97.8	9
10	54.8	11.5	35.3	9.7	45.0	9.4	53.8	8.1	41.1	7.0	47.5	6.7	.25	0.62	.10	0.04	62.8	38.9	235.5	96.4	10
11	54.9	10.9	38.0	8.1	46.4	8.2	52.6	6.7	41.8	7.3	47.7	6.2	.42	0.81	.05	0.03	80.5	37.5	190.9	93.4	11
12	54.5	14.5	37.1	10.1	45.8	11.0	54.7	7.7	42.9	6.2	48.8	5.9	.28	0.53	.04	0.04	81.3	20.5	177.8	104.2	12
13	52.5	12.0	35.2	9.8	43.8	9.9	51.7	8.5	41.9	4.4	46.8	5.9	.20	0.41	.08	0.06	109.0	37.0	229.9	96.8	13
14	52.5	12.3	34.9	11.5	43.7	10.9	52.2	8.4	40.6	5.3	46.4	6.4	.11	0.34	.08	0.02	56.7	33.4	215.7	134.4	14
15	52.3	10.9	35.1	9.9	43.7	9.5	50.8	7.6	41.6	7.1	46.3	6.8	.34	0.60	.04	0.04	63.2	46.2	198.1	116.7	15
16	51.9	10.3	34.9	7.7	43.4	8.1	51.3	7.7	39.9	5.2	45.6	5.9	.14	0.26	.08	0.05	87.8	47.1	206.6	106.9	16
17	51.1	9.7	33.0	9.6	42.1	8.5	50.7	7.4	39.6	6.2	45.2	6.1	.09	0.20	.10	0.10	58.2	17.1	223.4	103.0	17
18	55.2	12.7	32.3	9.4	43.8	9.9	52.6	7.6	39.9	6.3	46.3	6.2	.16	0.41	.03	0.03	91.3	33.6	246.1	96.2	18
19	57.4	11.1	34.8	8.5	46.1	9.2	54.0	9.0	40.5	5.4	47.3	6.7	.03	0.07	.06	0.06	106.7	49.4	237.1	88.6	19
20	55.6	13.1	36.6	9.9	46.1	10.7	53.6	8.2	41.4	6.1	47.5	6.5	.16	0.32	.05	0.07	98.3	33.5	197.8	98.7	20
21	51.9	14.9	36.9	12.7	44.4	13.2	52.3	10.6	42.3	8.1	47.3	9.0	.18	0.36	.05	0.04	72.7	32.0	198.8	103.4	21
22	51.3	12.7	34.6	10.8	42.9	10.8	50.4	8.0	41.3	6.6	45.9	6.8	.14	0.43	.06	0.04	95.7	70.4	218.4	109.9	22
23	53.8	13.8	35.0	11.2	44.4	11.7	51.3	9.0	41.6	7.2	46.5	7.6	.17	0.30	.05	0.02	88.0	49.3	186.0	107.0	23
24	52.4	12.5	35.7	12.7	44.1	11.9	50.5	8.0	41.3	6.8	45.9	6.8	.15	0.42	.07	0.03	90.5	48.0	172.5	112.8	24
25	51.0	9.1	32.9	8.5	42.0	7.7	50.6	7.1	40.5	5.7	45.6	5.9	.30	0.49	.04	0.05	55.5	16.3	245.8	120.5	25
26	49.9	8.1	33.0	7.4	41.5	6.1	50.6	6.3	39.8	4.7	45.2	4.9	.10	0.23	.03	0.02	63.3	24.6	210.5	117.1	26
27	51.1	9.8	34.9	7.3	43.0	7.7	50.4	6.8	39.6	4.1	45.0	4.8	.04	0.11	.07	0.03	81.5	37.1	206.1	110.6	27
28	52.1	8.2	34.8	8.6	43.5	7.3	50.6	6.6	39.8	4.1	45.2	4.5	.13	0.39	.07	0.04	68.8	19.1	222.9	85.4	28
29	53.0	11.0	35.6	9.0	44.3	8.8	50.8	8.2	41.3	5.9	46.0	6.4	.18	0.32	.03	0.04	76.7	36.1	151.9	114.2	29
30	53.1	12.9	36.8	9.6	45.0	10.3	50.8	7.9	40.4	4.9	45.6	5.7	.21	0.37	.02	0.02	98.0	69.2	99.9	53.3	30
31	49.0	14.9	36.8	11.8	42.9	13.0	49.7	9.7	42.3	6.4	46.0	7.7	.36	0.40	.02	0.02	96.0	41.9	150.9	109.8	31
MO. AVG	54.1	11.5	35.7	9.6	44.9	9.5	52.7	7.8	41.5	6.4	47.1	6.5	.18	0.43	.06	0.04	79.7	44.0	208.4	106.3	

Table 13.--Residual correlations among climatic variables for January, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.71**	...	...	...	...	...	...	...	...
Avg.	.94**	0.91**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.88**	.82**	0.92**	...	...	...	...	...	...
2-inch min.. . .	.52**	.82**	.71**	0.73**	...	...	...	...	...
2-inch avg.. . .	.78**	.88**	.89**	.95**	0.90**	...	...	...	...
Precipitation. . .	-.09*	.16**	.03	-.01	.15**	0.06	...	...	...
Solar radiation. .	-.06	-.34**	-.20**	-.02	-.21**	-.11*	-0.28**	...	...
Evaporation. . . .	.09	-.21	-.04	.13	-.37	-.09	.24	0.53+	...
Wind	.05	-.00	.03	-.27	-.29	-.33	-.87**	-.50+	-0.36

** $P < 0.01$. * $P < 0.05$. + $P < 0.10$.

Table 14.--Residual correlations among climatic variables for February, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.64**	...	...	...	...	...	...	...	...
Avg.	.93**	0.88**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.85**	.66**	0.84**	...	...	...	...	...	...
2-inch min.. . .	.46**	.82**	.68**	0.59**	...	...	...	...	...
2-inch avg.. . .	.76**	.82**	.87**	.92**	0.86**	...	...	...	...
Precipitation. . .	.01	.30**	.15**	.07	.32**	0.20**	...	...	...
Solar radiation. .	-.03	-.41**	-.22**	.10*	-.34**	-.09+	-0.22**	...	...
Evaporation. . . .	.60**	.22	.50**	.66**	.24+	.50**	-.24+	0.41**	...
Wind	.35*	.21	.34*	.21	.22	.25+	.04	-.33*	0.41**

** $P < 0.01$. * $P < 0.05$. + $P < 0.10$.

Table 15.--Residual correlations among climatic variables for March, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.68**	...	...	...	...	...	...	...	...
Avg.	.93**	0.90**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.86**	.61**	0.81**	...	...	...	...	...	...
2-inch min.. . .	.56**	.87**	.76**	0.58**	...	...	...	...	...
2-inch avg.. . .	.81**	.83**	.89**	.90**	0.87**	...	...	...	...
Precipitation. . .	-.15**	.10*	-.04	-.12**	.13**	-0.01	...	...	...
Solar radiation. .	.08+	-.33**	-.12**	.32**	-.30**	.03	-0.16**	...	...
Evaporation. . . .	.55**	.24**	.46**	.65**	.19*	.51**	-.19*	0.57**	...
Wind	.28**	.42**	.39**	.07	.33**	.23**	.14	-.26**	0.27**

** P <0.01. * P <0.05. + P <0.10.

Table 16.--Residual correlations among climatic variables for April, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.54**	...	...	...	...	...	...	...	...
Avg.	.88**	0.88**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.77**	.28**	0.59**	...	...	...	...	...	...
2-inch min.. . .	.50**	.84**	.76**	0.36**	...	...	...	...	...
2-inch avg.. . .	.78**	.65**	.81**	.85**	0.80**	...	...	...	...
Precipitation. . .	-.22**	.11**	-.06	-.25**	.11**	-0.10*	...	...	...
Solar radiation. .	.18**	-.41**	-.13**	.53**	-.31**	.17**	-0.28**	...	...
Evaporation. . . .	.44**	-.03	.24**	.60**	.01	.39**	-.26**	0.61**	...
Wind	.07	.19**	.15**	-.13**	.14**	-.01	-.05	-.24**	0.27**

** P <0.01. * P <0.05. + P <0.10.

Table 17.--Residual correlations among climatic variables for May, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.47**	...	...	...	...	...	...	...	...
Avg.	.87**	0.84**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.83**	.29**	0.67**	...	...	...	...	...	...
2-inch min.. . .	.47**	.85**	.75**	0.37**	...	...	...	...	...
2-inch avg.. . .	.81**	.63**	.85**	.89**	0.76**	...	...	...	...
Precipitation. . .	-.32**	-.02	-.21**	-.31**	-.05	-0.24**	...	...	...
Solar radiation. .	.40**	-.32**	.07	.55**	-.24**	.27**	-0.19**	...	...
Evaporation. . . .	.50**	-.09+	.26**	.60**	-.01	.41**	-.33**	0.71**	...
Wind	-.17**	.08+	-.06	-.24**	.06	-.14**	.08+	-.18**	0.17**

** P <0.01. * P <0.05. + P <0.10.

Table 18.--Residual correlations among climatic variables for June, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.50**	...	...	...	...	...	...	...	...
Avg.	.88**	0.85**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.83**	.35**	0.70**	...	...	...	...	...	...
2-inch min.. . .	.62**	.77**	.80**	0.56**	...	...	...	...	...
2-inch avg.. . .	.85**	.56**	.82**	.94**	0.80**	...	...	...	...
Precipitation. . .	-.35**	-.09+	-.26**	-.38**	-.12**	-0.33**	...	...	...
Solar radiation. .	.34**	-.25**	.07	.53**	-.07	.35**	-0.32**	...	...
Evaporation. . . .	.55**	.02	.34**	.66**	.24**	.58**	-.38**	0.71**	...
Wind	-.00	.13**	.07	.04	.14**	.09+	-.08+	.13**	0.35**

** $P < 0.01$. * $P < 0.05$. + $P < 0.10$.

Table 19.--Residual correlation among climatic variables for July, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.57**	...	...	...	...	...	...	...	...
Avg.	.92**	0.84**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.85**	.45**	0.76**	...	...	...	...	...	...
2-inch min.. . .	.61**	.71**	.73**	0.58**	...	...	...	...	...
2-inch avg.. . .	.85**	.60**	.84**	.94**	0.82**	...	...	...	...
Precipitation. . .	-.33**	-.18**	-.30**	-.36**	-.19**	-0.34**	...	...	...
Solar radiation. .	.55**	-.02	.35**	.63**	.10*	.49**	-0.22**	...	...
Evaporation. . . .	.62**	.23**	.52**	.66**	.31**	.59**	-.30**	0.69**	...
Wind	-.19**	.09+	-.08+	-.12**	-.04	-.10*	.05	-.05	0.15**

** P <0.01. * P <0.05. + P <0.10.

Table 20.--Residual correlations among climatic variables for August, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.37**	...	...	...	...	...	...	...	...
Avg.	.84**	0.82**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.79**	.22**	0.62**	...	...	...	...	...	...
2-inch min.. . .	.54**	.69**	.74**	0.50**	...	...	...	...	...
2-inch avg.. . .	.79**	.44**	.75**	.94**	0.78**	...	...	...	...
Precipitation. . .	-.32**	.06	-.16**	-.37**	-.07	-0.30**	...	...	...
Solar radiation. .	.48**	-.22**	.17**	.60**	-.01	.43**	-0.30**	...	...
Evaporation . . .	.48**	-.11*	.23**	.59**	.12**	.48**	-.34**	0.69**	...
Wind	-.26**	-.05	-.19**	-.16**	-.05	-.13**	.05	-.02	0.22**

** P <0.01. * P <0.05. + P < 0.10.

Table 21.--Residual correlations among climatic variables for September, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.53**	...	...	...	...	...	...	...	...
Avg.	.88**	0.87**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.86**	.34**	0.69**	...	...	...	...	...	...
2-inch min.. . .	.57**	.80**	.78**	0.56**	...	...	...	...	...
2-inch avg.. . .	.84**	.58**	.81**	.93**	0.83**	...	...	...	...
Precipitation. . .	-.25**	.06	-.11*	-.29**	-.02	-0.20	...	...	...
Solar radiation. .	.41**	-.29**	.08	.55**	-.11*	.33**	-0.28*	...	...
Evaporation. . . .	.49**	-.06	.25**	.60**	.12*	.46**	-.28**	0.76**	...
Wind	-.33**	.01	-.19**	-.34**	-.03	-.24**	-.04	-.23**	0.00

** P <0.01. * P <0.05. + P <0.10.

Table 22.--Residual correlations among climatic variables for October, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.45**	...	...	...	...	...	...	...	...
Avg.	.85**	0.85**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.86**	.37**	0.72**	...	...	...	...	...	...
2-inch min.. . .	.46**	.88**	.79**	0.49**	...	...	...	...	...
2-inch avg.. . .	.78**	.71**	.87**	.88**	0.85**	...	...	...	...
Precipitation. . .	-.24**	.13**	-.06	-.25**	.06	-0.12*	...	...	...
Solar radiation. .	.21**	-.49**	-.17**	.35**	-.35**	.03	-0.27**	...	...
Evaporation. . . .	.39**	-.01	.22**	.45**	.08	.31**	-.22**	0.56**	...
Wind	-.19**	.20**	.01	-.23**	.19**	-.04	.08+	-.27**	0.25**

** P <0.01. * P <0.05. + P <0.10.

Table 23.--Residual correlations among climatic variables for November, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.59**	...	...	...	...	...	...	...	...
Avg.	.90**	0.88**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.86**	.63**	0.84**	...	...	...	...	...	...
2-inch min.. . .	.48**	.85**	.74**	0.62**	...	...	...	...	...
2-inch avg.. . .	.74**	.83**	.88**	.90**	0.90**	...	...	...	...
Precipitation. . .	-.11*	.22**	.05	-.04	.19**	0.08*	...	...	...
Solar radiation. .	.05	-.35**	-.15**	.19**	-.26**	-.04	-0.15**	...	...
Evaporation. . . .	.42**	.18*	.33**	.42**	.13	.29**	-.19*	0.28**	...
Wind	.01	.21**	.12	-.02	.12	.06	.08	-.14+	0.39**

** P <0.01. * P <0.05. + P <0.10.

Table 24.--Residual correlations among climatic variables for December, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.62**	...	...	...	...	...	...	...	...
Avg.	.92**	0.88**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.84**	.73**	0.88**	...	...	...	...	...	...
2-inch min.. . .	.43**	.82**	.67**	0.65**	...	...	...	...	...
2-inch avg.. . .	.72**	.85**	.86**	.93**	0.89**	...	...	...	...
Precipitation. . .	-.15**	.21**	.01	-.03	.27**	0.12**	...	...	...
Solar radiation. .	-.04	-.41**	-.24**	.03	-.31**	-.13**	-0.34**	...	...
Evaporation. . . .	.64**	.48**	.63**	.65**	.36**	.58**	-.20+	0.30*	...
Wind	.44**	.37**	.45**	.37**	.34**	.40**	-.03	-.23+	0.22+

** P <0.01. * P <0.05. + P <0.10.

Table 25.--Residual correlations among climatic variables for year, 1960-79

Climatic variables	Air temperature			2-inch soil temperature			Precip-itation	Solar radiation	Evapo-ration
	Max.	Min.	Avg.	Max.	Min.	Avg.			
Air temperature:									
Min.	0.60**	...	...	...	...	...	...	...	...
Avg.	.91**	0.88**	...	...	...	...	...	...	...
Soil temperature:									
2-inch max.. . .	.81**	.53**	0.76**	...	...	...	...	...	...
2-inch min.. . .	.49**	.81**	.71**	0.55**	...	...	...	...	...
2-inch avg.. . .	.77**	.74**	.84**	.91**	0.84**	...	...	...	...
Precipitation. . .	-.16**	.12**	-.03**	-.17**	.10**	-0.06**	...	...	...
Solar radiation. .	.15**	-.33**	-.08**	.36**	-.22**	.12**	-0.24**	...	...
Evaporation . . .	.46**	.02	.28**	.59**	.11**	.45**	-.29**	0.65**	...
Wind	-.04*	.16**	.07**	-.12**	.12**	-.02	.03+	-.16**	0.21**

**P < 0.01. *P < 0.05. +P < 0.10.

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